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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/883,244	06/19/2001	Peter C. Nielsen	92835-1	9573

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EXAMINER	
PURVIS, SUE A	
ART UNIT	**PAPER NUMBER**
1734	9

DATE MAILED: 04/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/883,244	NIELSEN ET AL.	
	Examin r	Art Unit	
	Sue A. Purvis	1734	

-- The MAILING DATE f this c mmunication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 March 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-30* is/are pending in the application.

4a) Of the above claim(s) *19-23* is/are withdrawn from consideration.

5)☒ Claim(s) *2-18 and 30* is/are allowed.

6)☒ Claim(s) *24,28 and 29* is/are rejected.

7)☒ Claim(s) *25-27* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Pri rity under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *2,3,5,7* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I drawn to the labeling apparatus in Paper No. 8 is acknowledged. The traversal is on the grounds that MPEP §808.02 also requires that a separate filed of search be required. This is not found persuasive because the MPEP §808.02 actually says that in order to establish reasons for insisting upon restriction, the examiner must show by appropriate explanation **one** of the following: (A) separate classification thereof; (B) a separate status in the art when they are classifiable together; or (C) a different field of search. Thus the examiner does not have to show all of these reasons, just one. Here, the search required for Group I of the invention does not include the search required for Groups II or III.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 24 is rejected under 35 U.S.C. 102(b) as being anticipated by Labombarde (US Patent No. 2,745,665).

The preamble of the claim is not needed to give "life, meaning, and vitality" to the claim, thus the preamble is not given patentable weight. (See MPEP §2111.02.) Labombarde discloses a suction feeding mechanism with at least one bellows (915, 916) with extended and retracted positions. Each bellows has a suction tube (910, 911) with tube mouths (917, 918) extending interiorly of the bellows. The tube includes perforations (920) on its side. (Col. 4, lines 36-50; Col. 6, lines 61-75; Col. 7, lines 1-12; Figure 14.)

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (US Patent No. 5,829,351) in view of Kral (US Patent No. 6,321,812 B1).

Anderson includes an indexing turret (22) carrying a plurality of tamping labelers (38). A stepper motor (56) is activated or energized for rotation of its output shaft (58) by a fruit sensing switch (150) positioned beside the conveyor (14) to detect the approach of a fruit in a cradle on the conveyor. Once energized, the stepper motor (56) accelerates from standstill to a rotational speed which causes the velocity of the end of the bellows (38) to match that of the conveyor (14). The motor (56) rotates the turret (22) by means of a gear train (48, 50). The gear train (68, 70) also rotates the label cassette (12). The label cassette is releasably retained in place. (Col. 2, lines 56-67; Col. 3, lines 1-14; Col. 4, lines 1-7; Figure 3.)

Anderson does not disclose a timing belt driven by the stepper motor or a drive pinion meshingly engages with the timing belt. In Anderson, the sprocket or gear (70) is considered to be equivalent to applicant's drive minion.

Kral discloses a labeler. Figures 1 through 4 show a first embodiment which uses a gear (45) driven by a motor (48) to mesh with a plate (23). Figure 10 discloses an alternative embodiment where a belt (70) meshes with the plate (23). The belt (70) is advanced by drive mechanism (69). (Col. 3, lines 11-18; Col. 4, lines 40-57.)

It would have been obvious to one having ordinary skill in the art at the time the invention was made that an alternative driving means in the device of Anderson is one which uses a timing belt as shown in Kral, because Kral discloses that there are several known alternative ways of driving a system including using gears or timing belts. Drive means can be either chain drive systems or friction drive systems, the different systems are within the purview of the artisan. One of ordinary skill would know that using a single timing belt to rotate the turret and advance the label web is advantageous because it limits the amount of driving mechanisms which are in the apparatus, thus limiting maintenance needs of the device.

6. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. in view of Kimball et al. (US Patent No. 4,589,943) and Elharrar et al. (US Patent No. 5,958,175).

Anderson includes an indexing turret (22) carrying a plurality of tamping labelers (38). There is a direct connection between the drive of the bellows wheel or turret (22) and the label cassette (12), thus they are driven in synchronism. (Col. 4, lines 29-35.)

Anderson does not disclose a label web which includes a pin hole between each label with a pin wheel engaging the pin holes.

Kimball discloses an apparatus for applying adhesive labels. The labels are carried on a web (116) and there are pin holes (82) located between the labels. The device includes a pin wheel (88) with ratchet teeth (112) thereon for engaging the holes on the label web. The device also includes a guide (114) which aligns the label web to the pin wheel (88). The pin wheel (88) is driven intermittently by the main motor of the apparatus in correspondence with the advance of the articles to be labeled. (Col. 9, lines 36-42; Figures 3 and 4.)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a label web with pin holes and a pin wheel to engage that web, because that type of web allows for a more precise control of the web speed. The engaged pin holes ensure that the web doesn't slip from the driving roller. Furthermore, it is well known to use webs such as these as shown in Kimball.

Anderson in view of Kimball does not disclose a pawl associated with the pin wheel.

Elharrar discloses a labeling machine including a pin wheel (45) and a pawl (49).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a pawl associated with the pin wheel in the device of Anderson in view of Kimball, because it is well known in the art to use pawls in combination with pin wheels. Thus it is within the purview of the artisan to decide to use or not use a pawl in such a device. Further references are listed below which show the use of a pawl in combination with a pin wheel.

Allowable Subject Matter

7. Claims 2-18 and 30 are allowed.

8. Claims 25-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is an examiner's statement of reasons for allowance:

Regarding claims 30 and 2-18, prior art does not teach or suggest a labeling apparatus which includes a vision system for imaging the products and a plurality of labelers downstream at a different transverse location where a processor determines a transverse position of a given product and sends an activation signal to the labeler closest to the determined transverse position. Sardo (US Patent No. 6,349,755 B1) includes a camera (32) and feelers (22) for determining the position of articles to be labeled. Of particular interest to the device of Sardo is vertical height however, not the transverse position. The plurality of labelers (40) downstream are adjustable vertically not transversely and there is no reason or motivation for having the labelers adjustable transversely. Hartman (FR 2 725 955 A1) discloses a labeler similar to Sardo, except the labelers (7) are not positioned transversely but they must move transversely in order to label the articles as seen from the Figure. While there is motivation for modifying Hartman so that the labelers are positioned at transverse locations, when an artisan looks to Sardo, there is no motivation for having an activation signal sent to the labeler closest to the determined transverse position of the articles. Both Hartman and Sardo are designed to accommodate articles where the position of the articles on the conveyor is known, not determined by an imaging device.

Regarding claims 25-27, there is no reason or suggestion for modifying Labombarde as required by these claims. The device of Labombarde is designed to separate sheets and trying to change the device in Labombarde as set forth by the applicant would amount to improper

hindsight reasoning. Applicant's use of an air blocking member (166) and a stationary disc-shaped core (110) are features needed in the use of the bellows and air diffuser in the labeling machine. Prior art of interest to these claims are Anderson et al. '779 (US Patent No. 6,230,779 B1) and Weisbeck (US Patent No. 6,257,294 B1). Neither of these patents renders the claims non-obvious, however. They are cited for their use of bellows along with air pressure and vacuum means.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Drawings

10. New corrected drawings are required in this application because the drawings filed with the application are informal. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. La Mers (US Patent No. 4,648,930) discloses the use of timing belts to operate the labeling machine. Motor (91) is coupled to belt (92). Timing belt (110) drives the label feed. (Col. 5, lines 20-51.) The feed roll (64), which pulls the label strip (10) off the supply reel, is fixed to and driven by the feed shaft (114). The single cycle clutch is enabled to turn the feed shaft when a pin (117) on the slide (104) hits a pawl (119) to pivot the pawl out of engagement with the toothed wheel (121) on the feed shaft, which releases the single cycle clutch for turning the feed shaft (114). Thus, the feed roll (64) cannot turn until a predetermined time in each cycle.

b. Brochier (FR 2 719 020 A1) discloses a device where objects (2), which are arranged in an ordered configuration, are labeled by labeling heads (5).

c. Jodrey et al. (US Patent No. 4,411,393) discloses a web tension control system where the web has pin holes and a pin wheel is used to grip the web to help control the web tension.

d. Stork (US Patent No. 4,813,355), Hermann (US Patent No. 4,369,085), and Long et al. (US Patent No. 5,066,346) disclose various devices all of which use a pin wheel associated with a pawl, which is used to stop the movement of the pin wheels.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sue A. Purvis whose telephone number is 703-305-0507. The examiner can normally be reached on Monday through Thursday 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rick Crispino can be reached on 703-308-3853. The fax phone numbers for the

organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-1495.

Sue A. Purvis
Examiner
Art Unit 1734

sp
April 3, 2003